

AMENDMENTS TO THE CLAIMS

1. (Currently amended) Aluminum-Aluminium fluoride obtainable by treating a starting aluminum-aluminium fluoride having a fluorine content not less than 90%, ~~preferably not less than 95%~~ relative to the stoichiometric, with an alkali metal derivative, ~~preferably with an aqueous solution containing one or more alkali metal salts.~~
2. (Currently amended) Aluminum-Aluminium fluoride according to claim 1, in which the surface area of the starting aluminum-aluminium fluoride is not less than 25 m²/g, and which starting aluminum-aluminium fluoride consists substantially of the crystalline phase designated γ (gamma).
3. (Currently amended) Aluminum-Aluminium fluoride according to claim 1~~claims 1-2~~, in which the alkali metals of the salts that are used belong to Group I of the periodic table ~~and are preferably selected from sodium and potassium and their mixtures, more preferably potassium.~~
4. (Currently amended) Aluminum-Aluminium fluoride according to claim 3, in which the anion of the salt is derived from an inorganic acid, ~~preferably a strong acid.~~
5. (Currently amended) Aluminum-Aluminium fluoride according to claim 1~~claims 1-4~~, in which the concentration of the alkali metal salts in the aqueous solution is from 0.1 M to 0.0001 M, ~~more preferably from 0.01 M to 0.001 M.~~
6. (Currently amended) Process for preparing the aluminum-aluminium fluoride according to claim 1~~claims 1-5~~, in which a starting aluminum-aluminium fluoride, having a fluorine content not less than 90%, ~~preferably not less than 95%~~ relative to the stoichiometric, is treated with an alkali metal derivative, ~~preferably with an aqueous solution containing one or more alkali metal salts.~~
7. (Currently amended) Process for preparing the aluminum-aluminium fluoride according to claim 6, in which the starting aluminum-aluminium fluoride is treated by impregnation with an aqueous solution containing one or more alkali metal salts.

8. (Currently amended) Process according to claim 6 ~~claims 6-7~~, in which AlF₃, after impregnation, is treated to remove the excess solution, dehydrated at temperatures between 100°C and 150°C, ~~preferably 100-130°C~~, and calcined in a stream of inert gas, at a temperature generally from 300°C to 450°C, ~~preferably from 350°C to 400°C~~.

9 - 11 cancelled

12. (Currently amended) Catalyst comprising the aluminum-aluminium fluoride according to any one of claims 1 to 5 claim 1 as a support.

13. (Original) Catalyst according to claim 12, comprising a chromium compound supported on the support.

14. (Currently amended) Catalyst according to ~~claim 12 or 13~~ claim 13, comprising trivalent chromium.

15. (Currently amended) Catalyst according to ~~any one of claims 12 to 14~~ claim 12, comprising chromium and having a chromium content of 1-20 wt.%, ~~preferably 5-15 wt.%~~.

16. (Currently amended) Process for preparing the catalyst according to any one of claims 12 to 15 a catalyst comprising the aluminum fluoride according to claim 1 as support, comprising the treatment of the aluminum-aluminium fluoride according to ~~any one of claims 1 to 5~~ claim 1 with a solution comprising a catalytically active metal.

17. (Currently amended) Processing The process according to claim 16, wherein the solution is a solution of a chromium compound.

18. (Original) Process according to claim 17, wherein the chromium compound is a water-soluble chromium (III) salt.

19. (Currently amended) Process according to ~~any one of claims 16 to 18~~ claim 16, in which the treatment of AlF₃ with the solution comprising the catalytically active metal is carried out with a volume of a concentrated aqueous solution of a water-soluble derivative of the catalytically active metal less than or equal to the volume of the pores in the support.

20. (Currently amended) Process according to ~~any one of claims 16 to 19~~ claim 16, in which the catalyst, after the treatment with the solution comprising the catalytically active metal, is dried and optionally the stage of impregnation and drying is repeated until the required quantity of metal is obtained in the catalyst.
21. (Currently amended) Process according to claim 16 ~~any one of claims 16 to 20~~, in which the catalyst is calcined at temperatures from 300°C to 400°C, ~~preferably from 350°C to 400°C~~, in a stream of inert gas, ~~preferably nitrogen~~, then activated with anhydrous HF, gradually reducing the flow of inert gas until there is the desired concentration of HF in the gas mixture.
22. (Currently amended) Process according to claim 16 ~~any one of claims 16 to 21~~, comprising the manufacture of aluminum-aluminium fluoride ~~according to the process of any one of claims 6 to 8 according to a process for preparing the aluminum-fluoride according to claim 1, in which a starting aluminum-fluoride, having a fluorine content not less than 90% relative to the stoichiometric, is treated with an alkali metal derivative~~.
23. (Currently amended) Process according to claim 22, wherein the treatment of the aluminum-aluminium fluoride with the solution comprising a catalytically active metal is carried out after treating AlF₃ with the solution of alkali metal salts.
24. (Currently amended) ~~Use of the catalysts according to any one of claims 12 to 15 in reactions~~ Reactions of gas-phase halogen exchange on halogenated organic compounds, fluorination of (H)CFC compounds or addition of HF to halogenated olefins which comprise the catalyst as claimed in claim 12.
25. (New) A Friedel-Crafts type, in reactions of halogen exchange and of addition of hydrogen halides on multiple carbon-carbon bonds which comprises a catalyst which comprises the aluminum fluoride as claimed in claim 1.
26. (New) A reaction of isomerization of (HCFC-123a) to (HCFC-123) which comprises a catalyst which comprises the aluminum fluoride as claimed in claim 1.

27. (New) Aluminum fluoride according to claim 4, in which the alkali metals of the salts that are used belong to Group I of the periodic table are potassium and said inorganic acid is a strong acid.